0052030

044683

Job No. 22192 Written Response Required? NO Closes CCN: N/A OU: 200-ZP-1 TSD: N/A ERA: N/A Subject Code: 8630

ERC Team **Environmental** Restoration Contractor Interoffice Memorandum

TO:

M. A. Buckmaster, H4-80

DATE:

March 28, 1997

COPIES:

See Below

FROM:

R. T. Coffman

Onsite Measurement Services

H9-11/372-9373

SUBJECT:

200-ZP-1 PHASE II PERFORMANCE MONITORING, GROUNDWATER

RESULTS, FEBRUARY 1997, REV 0

## REFERENCES:

BHI, 1996, On-Site Measurements Quality Assurance Plan, BHI-00852, REV 0, Bechtel 1. Hanford, Inc., Richland, Washington.

- BHI, 1995, Field Screening Procedures, BHI-EE-05, Bechtel Hanford, Inc., Richland. 2. Washington.
- BHI, 1995, 200-ZP-1 Field Screening Support Logbook, EL-1273, Bechtel Hanford, Inc., 3. Richland, Washington.

This data package contains field screening results for groundwater samples analyzed to support 200-ZP-1 IRM Phase II performance monitoring. The Quality Assurance level for this work corresponds to OA-1 as specified in the reference 1 (BHI 1996). Samples collected and analyzed during February 1997 were managed under SAF C97-014, C97-015, and C97-018

Attachment 1 contains Volatile Organic Compound (VOC) results for groundwater samples collected to support the referenced project. The VOC analysis results on 3/3 and 3/4 were generated using the Hewlett - Packard 5890 gas chromatograph with a headspace autosampler, and VOC analysis results on 3/5 were generated using a Photovac 10S plus portable gas chromatograph. Both instruments were operated in accordance with Field Screening Procedure (FSP) 1.1, Aqueous Headspace Analysis of Volatile Organic Compounds in Water (BHI 1995). It was necessary to utilize the Photovac 10S plus portable gas chromatograph when on 3/4, the Hewlett Packard 5890 support computer hard drive failed. The computer was replaced and has been restored to normal operation. Samples analyzed using the Photovac were B0JYW7, B0JYW5, B0JY24, and B0JY25. Information concerning operation and calibration of the gas chromatographs is contained in instrument logbooks EL-1329 and EL-1332. Please contact me if you have any questions on this information.

R. T. Coffman, Engineer/Analyst

R.T. Coffma

M. A. Buckmaster, H4-80 Page 2

## Attachments:

Attachment 1. 200-ZP-1 IRM Phase II Performance Monitoring, Groundwater Results, February 1997

Attachment 2. Sample Chain of Custody Sheets

## Copies:

J. R. Freeman-Pollard, H9-12, w/attachment 1 only

B. H. Ford, H0-02, w/attachment 1 only

M.J. Galgoul, H9-12, w/attachment 1 only

I. D. Jacques, H9-10, w/attachment 1 only

R. B. Kerkow, H9-10, w/attachment 1 only

A. M. Hopkins, H9-11, w/attachment 1 only

S. A. Strope, T7-12, w/attachment 1 only

L. C. Swanson, H9-11, w/attachment 1 only

BHI Document Control, H4-79, w/original attachments

## 200-ZP-1 Phase II Performance Monitoring Groundwater Results, February 1997 SAF C97-014, C97-015, and C97-018

Sample	HEIS	Sample	Analysis	Chloroform	Carbon Tetrachloride	Trichloroethylene
Location	Number	Date	Date	(μg/L)	(µg/L)	(μg/L)
299-W14-9	BOJY16	2/27/97	3/4/97	41	290	7
Duplicate @ 299-W14-9	BOJY29	2/27/97	3/4/97	40	280	6.8
299-W15-1	BOJRD2	2/24/97	3/4/97	20	2700	12
Duplicate @ 299-W15-1	B0JRD3	2/24/97	3/4/97	46	3000	18
299-W15-4	BOJY17	2/20/97	3/3/97	10	-550	<2.0
299-W15-7	BOJRD4	2/20/97	3/3/97	39	2300	17
299-W15-10	BOJRD5	2/26/97	3/4/97	30	3200	14
299-W15-11	B0JXX3	2/20/97	3/3/97	25	2500	6.9
299-W15-15	B0JY21	2/20/97	3/3/97	- 10	1500	<2.0
299-W15-19	B0JY22	2/20/97	3/3/97	5.6	110	<2.0
299-W15-25	B0JYW1	2/24/97	3/4/97	90	2800	6.6
* 299-W15-30	B0JYW5	2/24/97	3/5/97	49	6500	<2.0
* 299-W15-31A	B0JYW7	2/24/97	3/5/97	37	5700	3.9
299-W15-38	B0JYW2	2/25/97	3/4/97	31	2300	<2.0
299-W15-39	B0JY23	2/27/97	3/4/97	21	1000	<2.0
* 299-W18-1	B0JY24	2/26/97	3/5/97	16	1500	<2.0
* 299-W18-4	B0JY25	2/27/97	3/5/97	<4.0	11	<2.0
299-W18-21	B0JY26	2/20/97	3/3/97	9.8	1100	<2.0
299-W18-23	BOJRF6	2/21/97	3/3/97	3.4	470	<2.0
299-W18-26	BOJRF4	2/21/97	3/3/97	22	220	<2.0
Duplicate @ 299-W18-26	BOJRF5	2/21/97	3/3/97	23	380	<2.0
299-W18-27	BOJY27	2/19/97	3/3/97	2.3	370	<2.0
299-W18-28	BOJY28	2/19/97	3/3/97	13	22	<2.0
299-W18-30	B0JY15	2/3/97	2/12/97	16	1000	2.2
299-W18-32	B0JY30	2/19/97	3/3/97	<2.0	3.8	<2.0
699-39-79	BOJRF3	2/21/97	3/3/97	3.3	250	<2.0

j - Value less than practical quantitation limit

VOA Instrument: Hewlett Packard 5890 GC, Serial # 3235A47685 Method: Dual DB-VRX columns, ECD/FID, 1 mL headspace injection Logbook: 200-ZP-1 Field Logbook, EL-1273, pgs 132 to 134

 VOA Instrument: Photovac 10S Plus GC, Serial # 8LDG203 Method: 5 mL/min HP Air, 11.7 eV lamp, 250 uL headspace Injection Logbook: 200-ZP-1 Field Logbook, EL-1273, pgs 132 to 134

Analyst:

4. T Colpma - 4-8-97

Pacific Northwest Nati Laboratory	onal	СВ	IAIN OF CUSTO	DY/SAM	IPLE A	NALYSIS	REQ	UEST			C97-018-1	6 Page	1 of 1,
Collector RT SICKLE (	(RFS)		Company Contact JH Kessner	Tele (5	phone No. 09) 372-95:	38		Project Co Stewart,			Data Turnaro Field	ınd	
Project Designation 200-ZP-1 IRM (Group 3) Gro	<u> </u>	FY1997	Sampling Location 200W					SAF No. C97-018	1	,			
Ice Chest No.			Field Logbook No.	111-6	13165	e 2		Method of	Shipment GOV-	Veh	, che		
Shipped To  Mobile Laboratory			Offsite Property No.	~ / A				Bill of Lad	ing/Air Bill				
POSSIBLE SAMPLE HAZAF	RDS/REMARKS	**	Preservation	HCl to pH <2 Cooled to 4C									
	•		Type of Container	Gs*						<u> </u>			ļ
			No. of Container(s)	1				<u> </u>	<u> </u>	ļ			ļ
Special Handling and/or Stora	ge		Volume	40ml								·	
	SAMPLE	ANALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time			11				1	1		
B0JY30	Water	FEB 19 19	97 1208	~									
												<u></u>	ļ
										ļ			ļ
											<u> </u>		
													<u> </u>
CHAIN OF POSSESSION	Date/Time	Sign/Print	Names Date/T	ime		INSTRUCTIO ctivity Exempt.	ons					S =	Soil Sediment Solid
Relinquished By RT SICKLE (RFS)	1 2247	1436 RZ Steffler	R3 Still 2.	1647 1420					:			SL =	Sludge Water Oil
Relinquished By	Date/Time 2-24-47 0	Received By RA	3. Kert # 2-24-	ime 0930 97								A -	Air Drum Solids Drum Liquids
Relinquished By	Date/Time	Received By	Date/T	ime					•			T - WI -	Tissue Wipe
Relinquished By	Date/Time	Received By	Date/T	ime								V -	Liquid Vegetation Other
LABORATORY Received By	,			Title	<u> </u>						Date/Tim	c	
SECTION  FINAL SAMPLE Disposal N DISPOSITION	Aethod					Disposed By					Date/Tim	e	······································

Pacific Northwest Laboratory	National		CHA	AIN OF CUSTO	DY/SAM	IPLE A	NALYS:	IS REQ	UEST			C97-018-	14 Page	1 of 1,
Collector AT SICK	LE (RFS)	L		Company Contact JH Kessner	Tele (5	phone No. 09) 372-953	38		Project Co Stewart,			Data Turnaro Field	ound	
Project Designation 200-ZP-1 IRM (Group	3) Groundwater S	ampling FY19	97	Sampling Location 200W					SAF No. C97-018	3		•		
Ice Chest No.	~/4		j	Field Logbook No. <i>EFL</i> - /// ·	٠. 6	PAGE	82		Method of	Shipment 600- U	y hicle			
Shipped To Mobile Laboratory		•	(	Offsite Property No.	-1/4				Bill of Lad	ing/Air Bill i ペンパ	No.			
POSSIBLE SAMPLE H	AZARDS/REMA	RKS		Preservation	HCl to pH <2 Cooled to 4C							-		
				Type of Container	Gs*									
				No. of Container(s)	1			<u> </u>						
Special Handling and/or	Storage			Volume	40ml		1							
	S.	AMPLE ANA	LYSIS		VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Ma	trix *	Sample Date	Sample Time			1							
B0JY28	w	ater	EB 19 199	1230	2									
							·							
													*****	
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						<del></del>								
<u> </u>			***************************************											
Relinquished BY (RFS) Relinquished By	equished By Date/Time Received By 2:24-47 0430 ms Ke				me 97 1430 me 0430		INSTRUCT tivity Exempt.						S = SE = SO = SL = U = O = DS = DL = SL = SL = SL = SL = SL = SL	Soil Sediment Solid Studge Water Oil Air Drum Solids Drum Liquids
Relinquished By Date/Time Received By Date/Time  Relinquished By Date/Time Received By Date/Time													WI L V	Tissue Wipe Liquid Vegetation Other
LABORATORY Receives	ved By		<u></u>		Title	<u> </u>						Date/Tir	ne	
<u> </u>	oosal Method				<del></del>	<u></u>	Disposed B	у	,	<del></del>		Date/Tir	ne	

Pacific Northwest Nat Laboratory	ional	СВ	AIN OF CUSTO	DY/SAM	IPLE A	NALYS	SIS REC	QUEST		,	C97-015-	9 Page	1 of 1
Collector RT SICKLE	(RFS)		Company Contact J.H. KESSNER	Tele	phone No. 09) 372-95	38		Project C Stewar	Coordinator t, DL		Data Turnaro Field	und	
Project Designation 200-ZP-1 IRM (Group 2) Gr	roundwater Sampling-	-FY1997	Sampling Location 200-W					SAF No. C97-0	15				
Ice Chest No.	- 503		Field Logbook No.	FL-1	1111-6	/		Method	of Shipment	Hand	Currie	L	
Shipped To Mobile Laboratory			Offsite Property No.	NA	<u> </u>			Bill of La	ding/Air Bill		NA		
POSSIBLE SAMPLE HAZA	RDS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C									
			Type of Container	Gs*									
			No. of Container(s)	1		İ							.]
Special Handling and/or Stor	age		Volume	40ml									
	SAMPLE	ANALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time										
B0JRF4	Water	2-21-97	0932	人									
													<u></u>
CHAIN OF POSSESSION Relinquished By	Date/Time	Sign/Print	D	ime	TOTALA	INSTRUC CTIVITY EX					-	S = SE = SO =	Soil Sediment Solid Sludge
Relinquished By PT SICKLE (BES)		830 12 Steffler	A Stiff 2-24-		4				• .			W =	Water Oil
Relinguished By	Date/Time	Received By R 130 RB Karks	5. Kiff 2-24	-97 0930					•			DS -	Air Drum Solids
Relinquished By				ime					•			T - WI -	Drum Liquids Tissue Wipe
Relinquished By	Date/Time	Received By	Date/T	ime								v -	Liquid Vegetation Other
LABORATORY Received B SECTION	у			Title	<u>.l.,</u>	····			•	<del></del>	Date/Tin	ie	
FINAL SAMPLE Disposal DISPOSITION	Method					Disposed	Ву				Date/Tin	ıe	

Pacific Northw Laboratory	est National		CHA	AIN OF CUSTO	DY/SAM	IPLE A	NALYS	SIS REC	QUEST .			C97-015-1	0 Page	1 of 1
Collector AT	SICKLE (RFS)		K	Company Contact J.H. KESSNER		phone No. 09) 372-953	38		Project C Stewart	oordinator , DL	<del>, , ,,, ,,</del>	Data Turnarov Field	ınd	
Project Designation 200-ZP-1 IRM (Gr	oup 2) Groundwater S	ampling-FY19		Sampling Location 200-W					SAF No. C97-01	5		<u> </u>		
Ice Chest No.	SML- 503	» ·		Field Logbook No.	FL - 1	111-6	4		Method o	f Shipment	Han	d Care	iel	
Shipped To Mobile Laboratory			(	Offsite Property No.	NA				Bill of Lac	ding/Air Bill	Νo.	VA		
POSSIBLE SAMPL	E HAZARDS/REMA	RKS		Preservation	HCl to pH <2 Cooled to 4C									
				Type of Container	Gs*									
				No. of Container(s)	1									
Special Handling an	d/or Storage			Volume	40ml									
	s		VOA BY FIELD GC Chloronated Hydrocarbon											
Sample No.	Ma	trix *	Sample Date	Sample Time			1							
B0JRF5	W	ater	2-21-97	0932	Х									
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CHAIN OF POSS		/Time	Sign/Print N	Date/T:	ime		INSTRUC CTIVITY EX		<b></b>		.!		S SE	Matrix *  Soil Sediment Solid
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Relinquished By	Date 2-24-97	Date/Ti	1 0930								A DS	Oil Air Drum Solids		
Relinquished Date/Time Received By Date/Time								T :	<ul> <li>Drum Liquids</li> <li>Tissue</li> <li>Wipe</li> <li>Liquid</li> </ul>					
Relinquished By	Date	/Time	Received By	Date/T	ime								v -	<ul><li>Vegetation</li><li>Other</li></ul>
LABORATORY SECTION	Received By		_1		Title	1				,		Date/Time	:	
FINAL SAMPLE DISPOSITION	Disposal Method						Disposed 1	Ву			<del></del>	Date/Time		

Pacific Northwest Nati Laboratory	ional .	CH	AIN OF CUSTO	DY/SAM	PLE A	NALYS	SIS REC	QUEST			C97-018-	8 Page	: 1 of 1,
Collector RZ STEFFLI	ER (RFS)		Company Contact JH Kessner		phone No. 09) 372-95:	38		Project Co Stewart,			Data Turnaro Field	und	
Project Designation 200-ZP-1 IRM (Group 3) Gr	oundwater Sampling F	Y1997	Sampling Location 200W					SAF No. C97-018	· · · · · · · · · · · · · · · · · · ·	-	<u></u>		
Ice Chest No.	ML-503		Field Logbook No.	IHC-N	- 205	#63		Method of	Shipment ·	Hur	rd Car	ried	
Shipped To Mobile Laboratory	1 500		Offsite Property No.	NA				Bill of Lad	ing/Air Bill		NA.		
POSSIBLE SAMPLE HAZAI	RDS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C									
			Type of Container	Gs*									
			No. of Container(s)	1									
Special Handling and/or Store	ige		Volume	40ml									
	SAMPLE A	NALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon						,			
Sample No.	Matrix *	Sample Date	Sample Time		_								
B0JY22	Water	2-20-97	1013	X									
-		1											
	-												
										<u> </u>			
CHAIN OF POSSESSION		Sign/Print			SPECIAL ** Total A	INSTRUC Activity Exemp	ctions pt.					S SE	Matrix *  = Soil  = Sediment  = Solid
Relinquished By Staff	Date/Time 2-24-41 C43	Received By RB  U RBKarkow	Kerk Date/Ti	me 0930 97								SL	= Shudge = Water
Relinquished By	Date/Time	Received By	Date/Ti	me	]							A DS	<ul> <li>Oil</li> <li>Air</li> <li>Drum Solids</li> </ul>
Relinquished By	Date/Time	Received By	Date/Ti									T WI	<ul> <li>Drum Liquids</li> <li>Tissue</li> <li>Wipe</li> <li>Liquid</li> </ul>
Relinquished By	Date/Time	Received By	Date/Ti	me								٧	<ul><li>Vegetation</li><li>Other</li></ul>
LABORATORY Received B	у	<u></u>		Title	<u> </u>						Date/Tin	ne	
FINAL SAMPLE Disposal P	Method					Disposed	l By				Date/Tin	ne	

Pacific Northwest Nat Laboratory	ional		CH	IAIN OF CUSTO	DY/SAM	PLE A	NALYS	IS REQ	UEST			C97-018	-13 Page	1 of 1
Collector RT SICKLE	RFS:			Company Contact JH Kessner	Tele	phone No. 09) 372-953	38		Project Co Stewart,			Data Turnar Field	ound	
Project Designation 200-ZP-1 IRM (Group 3) Gr	roundwater Sa	mpling FY19	97	Sampling Location 200W				·	SAF No. C97-018	3				
Ice Chest No.	-/ A	<u> </u>		Field Logbook No.	11-16-	PALC	57		Method of	de. val	hecke			
Shipped To Mobile Laboratory				Offsite Property No.	/A				Bill of Lad	ing/Air Bill N 〜ン/へ	o.		<b>.</b>	.,
POSSIBLE SAMPLE HAZA	RDS/REMA	RKS		Preservation	HCl to pH <2 Cooled to 4C									
				Type of Container	Gs*	<u>.</u>								
				No. of Container(s)	1									
Special Handling and/or Stor	age			Volume	40ml							_		
	SA	MPLE ANA	LYSIS		VOA BY FIELD GC ~ Chloronated Hydrocarbon				·					
Sample No.	Mat	nix *	Sample Date	Sample Time		]		1						
B0JY27	Wa	iter	EB 19 19	97 1304	V									
			<u> </u>											
<u> </u>														
<u> </u>	-													
													<u> </u>	<u> </u>
CHAIN OF POSSESSION	011		Sign/Prin				INSTRUCT ctivity Exempt.						S =	fatrix * Soil Sediment Solid
Relinquished By  RT SICKLE (RFS)	Date/	47 1430	Received By	1.3. Still 2.20	0-47 1430	-							SL = W =	Sludge Water Oil
Relinquished By	Date/		Received By	RB-Kulff Dater 2-2J	Time 0930								DS -	Air Drum Solids Drum Liquids
Relinguished By	Date/	Time	Received By	Date	1 line								T -	Tissue Wipe Liquid
Relinquished By Date/Time Received By				Date/	Time								V -	Vegetation Other
LABORATORY Received E SECTION	Зу		<u> </u>		Title	<u> </u>					•	Date/T	ime	
FINAL SAMPLE Disposal DISPOSITION	Method					·	Disposed B	Зу	····	,		Date/T	ime	

Pacific Northwest N Laboratory	ational	CE	IAIN OF CUSTO	DY/SAM	IPLE A	NALYS	SIS REC	QUEST			C97-018	-3 Page	1 of 1
Collector RF THORNTO	N (RFS)		Company Contact JH Kessner		phone No. (09) 372-953	38		Project C Stewart	oordinator , DL		Data Turnar Field	ound	
Project Designation 200-ZP-1 IRM (Group 3)	Groundwater Samp	ling FY1997	Sampling Location 200W					SAF No. C97-01	8				
Ice Chest No.	- 281		Field Logbook No.	? . 5					f Shipment いら(十				
Shipped To Mobile Laboratory			Offsite Property No.						ing/Air Bill	No.	•		· · · · · · · · · · · · · · · · · · ·
POSSIBLE SAMPLE HAZ	ARDS/REMARK	S	Preservation	HCl to pH <2 Cooled to 4C									
			Type of Container	Gs*									
			No. of Container(s)	1									
Special Handling and/or St	orage		Volume	40ml									
	SAM	PLE ANALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix '	Sample Date	Sample Time		1			1	1				1
B0JY17	Water	2.70.97	1237	X				·					
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					-		TTO YO			<u>.                                    </u>		Ļ <u>,</u>	Matrix *
CHAIN OF POSSESSION	/	Sign/Print	Names			INSTRUC ctivity Exemp						s -	Soil Sediment
Relinquish of CHNTON 18	2.20	e /430 Received By 97 RZ Steffler	1.7 Styll 2-20	42 1430					:			SO - SL - W -	Solid Sludge Water
Relinquished By	Date/Tim 2-24-97	e C930 Received By RB Kerkov	Date/Ti	me 0930								🖈 -	Oil Air Drum Solids
Relinguished By	Date/Ti	ime								T -	Drum Liquids Tissue Wipe		
Relinquished By	Date/Ti	ime								v -	Liquid Vegetation Other		
LABORATORY Received SECTION	l By			Title	1						Date/Ti	me	
	al Method					Disposed 1	Ву				Date/Ti	me	<del></del>

Pacific Northwest Nati Laboratory	ional	СН	AIN OF CUSTO	DY/SAN	1PLE A	NALYS	SIS RE(	QUEST			C97-015-	8 Page	1 of 1
Collector AT SICKLE	(RFS)		Company Contact J.H. KESSNER		phone No. 509) 372-95			Project Co Stewart,	oordinator , DL		Data Turnaro Field	und	
Project Designation 200-ZP-1 IRM (Group 2) Gro	oundwater Sampling-	FY1997	Sampling Location 200-W			· <del></del> -		SAF No. C97-01:	5		. <u> </u>		
Ice Chest No. 5ML -	- 503		Field Logbook No.	EFL-1.	111-	6		Method of	f Shipment	Hur	d (no	ried	
Shipped To Mobile Laboratory			Offsite Property No.	NA				Bill of Lad	ling/Air Bill I		NA		
POSSIBLE SAMPLE HAZAI	RDS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C									T
}			Type of Container	Gs*									
<u>.</u>			No. of Container(s)	1									
Special Handling and/or Stora	ige		Volume	40ml									
	SAMPLE	ANALYSIS		VOA BY FIELD GC ~ Chloronated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time		L								
B0JRF3	Water	2-21-97	1007	人									
					<u> </u>								<u></u>
								<u> </u>	<u> </u>				
					<u> </u>					<u> </u>			
													<u> </u>
CHAIN OF POSSESSION	1	Sign/Print		<del></del>		LINSTRUCT						S - SÉ -	Matrix * Soil Sediment
Relinquished By RT SICKLE (RFS) Relinquished By	2-24-27	Received By  OS 30 KZ Steffler K.	3 Styll 2-24-91	ime 	]							SL - W -	Solid Sludge Water
R3. Still	2-24-47 0	1930 RB Kerlin	0 Kap-1620 2-24-	97 0930		-						A -	
Relinquished By	Date/Time	Received By	Date/Ti	ime	]							T -	Drum Liquids Tissue Wipe
Relinquished By	Date/Time	Received By	Date/Ti	me								v -	Liquid Vegetation Other
LABORATORY Received By SECTION	,	<u></u>	<del></del>	Title	<u></u>	<u></u>				•	Date/Tim	ie	·· <u>-</u>
FINAL SAMPLE Disposal M DISPOSITION	lethod	<u></u>		•		Disposed B	зу				Date/Tim	ıc	

Pacific Northwest Na Laboratory	tional	CH	IAIN OF CUSTO	DY/SAN	IPLE A	NALY	SIS REQ	UEST		.*	C97-015	5-11 Pag	ge 1 of 1
Collector RT SICKLE	(RFS)	<u> </u>	Company Contact J.H. KESSNER	Tele	phone No. (09) 372-95	38	<del></del>	Project Co Stewart,	oordinator DL		Data Turna Field	round	
Project Designation 200-ZP-1 IRM (Group 2) G	roundwater Sampli	ngFY1997	Sampling Location 200-W					SAF No. C97-01	5				
Ice Chest No. SML -	- 503		Field Logbook No.	FL - 11.	11-6			Method o	f Shipment	Hun,	d Car	ried	
Shipped To Mobile Laboratory			Offsite Property No.	N		<del></del>		Bill of Lac	ling/Air Bill l	No.	IVA		
POSSIBLE SAMPLE HAZA	RDS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C									
			Type of Container	Gs•					•				
			No. of Container(s)	1									
Special Handling and/or Stor	age		Volume	40ml									
	SAMPI	LE ANALYSIS	•	VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time									1	
BOJRF6	Water	2-21-97	0838	X									
												<u> </u>	
				<u> </u>					ļ <u></u>			<del> </del>	
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	<u> </u>			ļ		<u> </u>			ļ <u>.</u>			<del> </del>	
,						<u>1</u>			<u> </u>			<del> </del>	
CHAIN OF POSSESSION Relinquished By	Date/Time	Sign/Print	Names Date/Ti	mė.		INSTRUC						S SE	Matrix * = Soil = Sediment = Solid
AT SICKLE (AFS)	2.24.97	0830 RZ Stiller	1.7 Still 22	4-97 6830								SL W	<ul><li>Sludge</li><li>Water</li></ul>
Relinguished By	Date/Time 4-47 09)	Received By  RC RSK2rKow	RS. Kuk 2-24	me 0930					•			JA	<ul><li>Oil</li><li>Air</li><li>Drum Solids</li></ul>
Relinquished By	Date/Time	Received By	Date/Ti	me					•			ľτ	<ul><li>Drum Liquids</li><li>Tissue</li><li>Wipe</li></ul>
Relinquished By	Date/Time	Received By	Date/Ti	me								L V	<ul><li>Liquid</li><li>Vegetation</li><li>Other</li></ul>
LABORATORY Received B SECTION	у	<u> </u>		Title	<u> </u>						Date/T	ime	
FINAL SAMPLE Disposal DISPOSITION	Method					Disposed	Ву				Date/T	ime	

Pacific Northwest Natio	onal	СНА	IN OF CUSTO	DY/SAM	IPLE A	NALYS	IS REC	QUEST			C97-018-	12 Page	1 of 1
Collector RZ STEFFLER	I (RFS)	(	Company Contact JH Kessner		phone No. 09) 372-95:	38		Project C Stewar	Coordinator t, DL		Data Turnar Field	ound	
Project Designation 200-ZP-1 IRM (Group 3) Gro	undwater Sampling F		Sampling Location 200W					SAF No. C97-01	8				
Ice Chest No. SML -	503	F	ield Logbook No. しが	1C-1V-	205	#63		Method o	f Shipment	Han	L' Ca	ried	j)
Shipped To Mobile Laboratory			Offsite Property No.	JYt	4			Bill of La	ding/Air Bill ì	No.	NA		
POSSIBLE SAMPLE HAZAR	DS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C									
			Type of Container	Gs*									
			No. of Container(s)	1									
Special Handling and/or Storag	ge		Volume	40ml									
	SAMPLE A	NALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time				1						
BOJY26	Water	2-20-97	0910	X									
			,										
CHAIN OF POSSESSION	2 DitaTime	Sign/Print N		me		INSTRUCT ctivity Exempt.						S SE	Matrix * Soil Sediment Solid
Relinquished By RZ STEFFLER (RFS) 1.2	State 2.24-47	430 RB KirkIN	2-24-6	770930								w ·	Sludge Water
Relinquished By	Date/Time	Received By	· Date/Ti	me								A DS	- Oil - Air - Drum Solids
Relinquished By	Date/Time	Received By	Date/Ti	me					•			T WI	Drum Liquids Tissue Wipe
Relinquished By	Date/Time	Received By	Date/Ti	me					,			٧.	Liquid Vegetation Other
LABORATORY Received By SECTION				Title	<u> </u>						Date/Ti	me	
FINAL SAMPLE Disposal M DISPOSITION	fethod				·····	Disposed B	у				Date/Ti	me	

Pacific Northwest N Laboratory	ational	СВ	AIN OF CUSTO	DY/SAM	PLE A	NALYS	IS REQ	UEST			C97-018-	7 Page	1 of 1
Collector RF THORNTO	ON (RFS)		Company Contact JH Kessner		phone No. 09) 372-95	38		Project Co Stewart,			Data Turnaroi Field	ınd	
Project Designation 200-ZP-1 IRM (Group 3)	Groundwater Sampling F	FY1997	Sampling Location 200W					SAF No. C97-018		•			
Ice Chest No.	- 781		Field Logbook No.	- 5				Method of	Shipment UE 1-f				
Shipped To Mobile Laboratory	207		Offsite Property No.						ing/Air Bill )	No.			
POSSIBLE SAMPLE HAZ	ARDS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C									
			Type of Container	Gs*									
			No. of Container(s)	1									
Special Handling and/or St	orage		Volume	40ml									
	SAMPLE A	ANALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time										
B0JY21	Water	2.20.97	1315	X									
										ļ			<del>                                     </del>
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					ļ		ļ	<u> </u>					
						_	-	<u> </u>			<del>                                     </del>		
										<del>                                     </del>	-		<del>                                     </del>
CHAIN OF POSSESSIO  Relinquished By  RF THORNTON AFS  Relinquished By  Relinquished By	Date/Time / Z - Z o - S Date/Time	Sign/Print  1/30 Received By  77 P2 Steffer  Received By  Received By  Received By	R. P. Still 2-20 9	1930 ime -97 <sup>930</sup> ime		INSTRUCT				.1	. I	S = SE = SO = SL = W = DS = DL = T W = L V = V	fatrix * Soil Solid Sludge Water Oil Air Drum Solids Drum Liquids Tissue Wipe Liquid Liquid Urgetation Other
LABORATORY Received	d By			Title	I						Date/Tim	e ·	
SECTION FINAL SAMPLE Dispos DISPOSITION	al Method			·	· · -···	Disposed F	Зу				Date/Tim	e	

Pacific Northw Laboratory	est Natio	onal		CHA	IN OF CUSTO	DY/SAM	PLE AN	NALYSI	S REQ	UEST			C97-014	-11 Page	<u>l</u> of <u>l</u>
Collector RZ	STEFFLE	R (RFS)		c	ompany Contact J.H. KESSNER	Tele (5	phone No. 09) 372-953	8		Project Co Stewart,		<u></u>	Data Turna Field	round	· · · · · · · · · · · · · · · · · · ·
Project Designation 200-ZP-1 IRM (G	roup 1) Gro	undwater Sampli	ngFY1997		ampling Location 200-W					SAF No. C97-014					<del>-</del>
Ice Chest No.	SML	- 503		Fi	ield Logbook No.	HC-N	- 205	#63		Method of	Shipment	Hund	Carr	red	
Shipped To Mobile Laborator				0	ffsite Property No.	N				Bill of Lad	ing/Air Bill	No.	NA	, , , , , , , , , , , , , , , , , , ,	
POSSIBLE SAMPI	E HAZAR	DS/REMARKS	<u> </u>		Preservation	HCl to pH <2 Cooled to 4C									
					Type of Container	Gs*				_	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<del> </del>					No. of Container(s)	40ml					ļ	<u> </u>	ļ		<u> </u>
Special Handling a	nd/or Stora	ge			Volume				<u> </u>			<u></u>			
		SAMPL	E ANALYSI	s		VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No	Sample No. Matrix * Sample				Sample Time									(V : 10) P	
B0JRD4					1220	X		ļ — <u>-</u>				<u> </u>	<u> </u>		ļ
		·····				ļ			ļ		<u> </u>	<del> </del>	<del>                                     </del>	<u> </u>	<del> </del>
·			<del>` </del>						<u> </u>				<del> </del>	-	<del> </del>
		<del> </del>	_			<del> </del>					<del> </del>	<u> </u>	<u> </u>	<del> </del>	<del> </del>
<u> </u>															
									<u></u>						
CHAIN OF POSS	ESSION			Sign/Print Na	ımes		SPECIAL	INSTRUCT	IONS					s =	latrix *
Relinquished By RZ STEFFLER (B)	is Stiff	Date/Time	1430 R	CE Kerken	7-24-	me 0930 97						٠		SO = SL * W =	Sediment Solid Sludge Water Oil
Relinquished By	7	Date/Time	Rec	ceived By	Date/Ti	ime								A = DS =	Air Drum Solids
Relinquished By	quished By Date/Time Received I				Date/Ti	me								T * W1 =	Drum Liquids Tissuc Wipe
Relinquished By	equished By Date/Time Received By				Date/Ti	me					. •			V #	Liquid Vegetation Other
LABORATORY SECTION	Received By			<u> </u>	<del></del>	Title	J	<del></del> _	<u></u>	- <u></u>	<del></del>		Date/I	Time	
FINAL SAMPLE DISPOSITION	Disposal M	ethod						Disposed B	у		,		Date/1	ime	

Pacific Northwest Na Laboratory	tional		CHA	AIN OF CUSTO	DY/SAM	PLE A	ŅALYSI	S REQ	UEST			C97-014	-13 Page	<u>l</u> of <u>l</u>
Collector  RF THORNTON (RFS		. <u></u>		Company Contact J.H. KESSNER	Tele (5	phone No. 09) 372-95	38		Project Co Stewart,	ordinator DL		Data Turnaı Field	ound	
Project Designation 200-ZP-1 IRM (Group 1)		mplingFY19		Sampling Location 200-W			· · · · · · · · · · · · · · · · · · ·	**************************************	SAF No. C97-014			· · · · · · · · · · · · · · · · · · ·	*	·
Ice Chest No.	<b>3</b> 6 v s			Field Logbook No.	ے د	<del></del>			Method of	Shipment Gov :-	VEH			
Shipped To Mobile Laboratory	<u>- 25(</u>	- <del>-</del>		Offsite Property No.		<del></del>			Bill of Lac	ling/Air Bill	No.	· · · · · · · · · · · · · · · · · · ·		
POSSIBLE SAMPLE HAZ	ARDS/REMA	RKS		Preservation	HCl to pH <2 Cooled to 4C			<u> </u>	-	1	T			T
				Type of Container	Gs*									
				No. of Container(s)	1									
Special Handling and/or Sto	orage			Volume	40ml									
	ŞAI	MPLE ANAŁ	YSIS	400.000	VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matri	x *	Sample Date	Sample Time			h iday ba							
B0JXX3	Wat	er	2.20.97	1052	X									
								ļ	<u> </u>	ļ	ļ	ļ <u>.</u>		
	ļ				ļ		<u> </u>	ļ	<del> </del>	ļ		<u> </u>		<del> </del>
	<del>-</del>						<u> </u>		-	<del> </del>		<del> </del>		<del> </del>
							<u> </u>		-			<del>  -</del>		<del> </del>
					<del> </del>	<u> </u>			-	-		<del>                                     </del>		<del> </del>
CHAIN OF POSSESSION	/\		Sign/Print i		<u> </u>	SPECIAI	L INSTRUCT	IONS		<u> </u>	1		S ≖ SE =	fatrix * Soil Sediment
Relinquished By RF THORNTON UNITS	Date/1	1420	Received By	A. Steple 2-20						•			SL ≃	Solid Sludge Water
Relinquished By	Date/I 2-24-47 Date/I	ime <i>0930</i>	Received By RECEIVED BY RECEIVED BY	Date/Ti	-97 0930					•			DS ~ DL =	Oil Air Drum Solids Drum Liquids
Relinquished By				Date/Ti						•			wt +	Tissue Wipe Liquid
Relinquished By	Date/I	ime	Received By	Date 11	:::::5									Vegetation Other
LABORATORY Received SECTION	Ву		<u> </u>	· · · · · · · · · · · · · · · · · · ·	Title					, , ,		Date/Ti	inc	
	l Method					<del></del>	Disposed B	у			· · · · · ·	Date/Fi	ine	

Pacific Northwest Natio Laboratory	nal	СН	AIN OF CUSTO	DY/SAM	IPLE A	NALYSI	S REQ	UEST			C97-018	Page	<u>1</u> of <u>1</u>
Collector R.ZZ			Company. Contact JH Kessner	Tele (5	phone No. (09) 372-953	8		Project Co Stewart,	ordinator DL		Data Turnar Field	ound	
Project Designation 200-ZP-1 IRM (Group 3) Gro		g FY1997	Sampling Location 200W			· · · · · · · · · · · · · · · · · · ·		SAF No. C97-018			<u>.</u>		
Ice Chest No. 5 17, L	431		Field Logbook No.	4 - 7	J · Z &	5 A 6	3	Method of	He	ind i	)ના હલ		
Shipped To Mobile Laboratory			Offsite Property No.					Bill of Lad	ing/Air Bill	No.			
POSSIBLE SAMPLE HAZAR	DS/REMARKS		Preservation	HCI to pH <2 Cooled to 4C									
			Type of Container	Gs*									
			No. of Container(s)	1					<u> </u>	<u> </u>			
Special Handling and/or Stora	ge		Volume	40mi			]		<u> </u>				<u> </u>
	SAMPLE	ANALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time										
B0JY15 🗸	Water	2.3.97	075.5	$\lambda$			<u> </u>		ļ	ļ			<del> </del>
	<u> </u>						-	-	<del> </del>	<u> </u> 			-
										<u> </u>	<del>-</del>	ļ. <del>-</del>	<del>-</del>
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	······································												
						<u> </u>			<u> </u>	<u> </u>		<u> </u>	
CHAIN OF POSSESSION		Sign/Print				INSTRUCT ctivity Exempt.						s -	Matrix *  Soil Sediment
Relinquished By  AC-L-122 (RP3)  Relinquished By  Relinquished By	Date/Time	Received By RZ	Steffler Date/T	ime / 1/08 ime 0 2 50								SL =	= Solid = Sludge = Water = Oil
Relinquished By		Received By  Received By  Received By	- PT COFF MAN Z/C	197								DS =	<ul> <li>Air</li> <li>Drom Solids</li> <li>Drum Liquids</li> <li>Tissue</li> </ul>
Relinquished By	Date/Time	Received By	Date/T	ime								WI -	- Wipe □ Liquid □ Vegetation
LABORATORY Received By				Title							Date/Ti		Other
SECTION	·			<del></del>		Diamenda			<del></del>		Data PP		
FINAL SAMPLE Disposal Me	ethod					Disposed B	У		ŕ		Date/Ti	IIIC	

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Pacific Northwe	est National		CH	AIN OF CUSTO	DY/SAM	IPLE A	NALYS)	IS REQ	UEST			C97-018	.9 Page	1 of 1
Collector RTS	ICKLE (RFS)	<u>l,, ,,,_,</u>		Company Contact  JH Kessner	Tele: (5	phone No. 09) 372-953	18		Project Co Stewart,			Data Turnare Field	ound	
Project Designation 200-ZP-1 IRM (Gro	oup 3) Groundwate	r Sampling FY 1	997	Sampling Location 200W					SAF No. C97-018					
Ice Chest No.		'n	1	Fleid Logbook No. と F乙	- 1111-	6			Method of		رنب			
Shipped To Mobile Laboratory		· · · · · · · · · · · · · · · · · · ·		Offsite Property No.	NU					ing/Air Bill I J VA	No.	· · · · · · · · · · · · · · · · · · ·		
POSSIBLE SAMPLE	HAZARDS/RE	MARKS		Preservation	HCl to pH <2 Cooled to 4C									
			NA	Type of Container	Gs*					<u> </u>				
				No. of Container(s)	1					·		<u> </u>		
Special Handling and		ر		Volume	40ml									
	,	SAMPLE AN	ALYSIS		VOA BY FIELD GC — Chloronated Hydrocarbon									
Sample No.	<u> </u>	Matrix *	Sample Date	Sample Time		1								
B0JY23		Water	3-3797	0946	Х									
								<u> </u>		ļ	<u> </u>			<u> </u>
					ļ		<u> </u>	ļ	<del> </del>		<u> </u>			
			<del></del>			<u> </u>		ļ <u>.</u>						<del>                                     </del>
						ļ		<u> </u>	<del>- </del> -		<u> </u>			<del> </del>
					ļ			<u> </u>	<del>- </del> -		<u></u>	<del> </del> -	<u> </u>	<del></del>
CHAIN OF POSSE			Sign/Print I				INSTRUCT etivity Exempt.	IONS	1		<u></u>		S -	Aatrix * Soil Sediment
Relinquished By RT SICKLE (R	(FS) 2.27-9	Date/Time	Received By RB RB Kerkon		me 1430 97					٠,	•		SL -	Solid Sludge Water
Relinquished By		Date/Time	Received By	Date/Ti	me								A -	Oil Air Drum Solids
Relinquished By	I	Date/Time	Received By	Date/Ti	me	1				•	٠		DL - T - WI -	Drum Liquids Tissue Wipe
Relinquished By	r	Date/Time	Received By	Date/Ti	me	1							L -	Liquid Vegetation Other
LABORATORY R	eceived By				Title	1				•		Date/Ti	ne	
L	Disposal Method	<u>,</u>			<del> </del>		Disposed By	у		<u></u>		Date/Tir	ne	

Pacific Northwest Nat	ional	CH	AIN OF CUSTO	DY/SAM	PLE A	NALYSI	S REO	UEST			C97-018-2	Page	1 of
Laboratory Collector			Company Contact	Tele	nhone No.			Project C	oordinator		Data Turnarow	ıd	·
Project Designation 200-ZP-1 IRM (Group 3) Group 3	oundwater Sampling	FY1997	JH Kessner Sampling Location 200W	(3	09) 372-953	38		SAF No. C97-01		<u> </u>	Field ·		
Ice Chest No.			Field Logbook No. & FC ^ 1 11	1-6				Method o	f Shipment	<b>h</b>		<b>-</b>	
Shipped To Mobile Laboratory			Offsite Property No.	\A					ling/Air Bill ! ん ( /)	No.			
POSSIBLE SAMPLE HAZAI	DS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C	}					]			
	NA		Type of Container	Gs*									
			No. of Container(s)	1 1	Í					<u> </u>			
Special Handling and/or Store			Volume	40ml									
7,371,373		ANALYSIS		VOA BY FIELD GC Chlororated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time										
B0JY16 🗸	Water	3.37.77	1246	X									<u> </u>
								<del> </del>	-	<del> </del> -	++	<u>.</u>	┼─
										<del> </del>			
													<del></del>
										<u> </u>			<del> </del>
CHAIN OF POSSESSION		Sign/Print	Names			INSTRUCTIC ctivity Exempt.	ONS		<u> </u>	,		S -	Matrix * Soil Sediment Solid
RT SICKLE (RES)	Date/Time 2-27-97 (4	Received By RB Kerken Received By	Po Kerk Date/Ti N 2-2 Date/Ti	7-97								SL -	Soud Shudge Water Oil
Relinquished By	Date/Time	Indeceived by			]							A - DS -	Air Drum Solids
Relinquished By	Date/Time	Received By	Date/Ti						•			T - Wi -	Drum Liquid Tissue Wipe
Relinquished By	Date/Time	Received By	Date/Ti	me					·			ν -	Liquid Vegetation Other
LABORATORY Received By SECTION	,			Title	····						Date/Time		
FINAL SAMPLE Disposal N	(ethod			<del></del>		Disposed By		· · · · · · ·			Date/Time		

PNNL		СН	AIN OF CUSTO	DY/SAM	IPLE A	NALYS	IS REQ	UEST			C97-018-	15 Page	e 1 of 1
Collector RT SICKLE (RFS)			Company Contact JH Kessner	Tele (5	phone No. 09) 37 <b>2</b> -953	38		Project Co	oordinator DL		Data Turnaro Field	ound	
Project Designation 200-ZP-1 IRM (Group 3) Gro	undwater Sampling FY	1997	Sampling Location 200W					SAF No. C97-01	8		·		
Ice Chest No.			Field Logbook No. ミデム・リロリ	٠٥_				(G-64)	Shipment			_	
Shipped To Mobile Laboratory			Offsite Property No.	}\ <u>\</u>					ling/Air Bill :	No.			
POSSIBLE SAMPLE HAZAR	DS/REMARKS	W	Preservation	HCl to pH <2 Cooled to 4C									
	(0		Type of Container	Gs*									
			No. of Container(s)	1					<u> </u>		<u> </u>		
Special Handling and/or Storag	ge iy ° (		Volume	40ml									
Le activisation	SAMPLE AN	Valysis	<u> </u>	VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time		l			1					
B0JY29 ≀·	Water	2.37 97	1246	7									
									<u> </u>	<u> </u>			
		ļ <u></u>		<u> </u>						·			
	<u> </u>		·	<u> </u>		ļ	<u> </u>			<u> </u>			
				ļ				-			-		
								· ·	<b> </b>	<u> </u>	1		
CHAIN OF POSSESSION	c //	Sign/Print	Names	<u> </u>		INSTRUCT		<u> </u>			<u> </u>	s	Matrix *
Relinquished By RT SICKLE (RES)	2-27-27 (43)	Received By RL	Kerk Date/Ti 2-27	mc 1430 1-97					•			SO SL	<ul> <li>Sediment</li> <li>Solid</li> <li>Studge</li> <li>Weter</li> </ul>
Relinquished By	Date/Time	Received By	Date/Tir	me								O A	- Oil
Relinquished By	Date/Time	Received By	Date/Tir	me			•					DL T	<ul> <li>Drum Solids</li> <li>Drum Liquids</li> <li>Tissue</li> <li>Wipe</li> </ul>
Relinquished By	Date/Time	Received By	Date/Tir	me								] L V	<ul><li>Liquid</li><li>Vegetation</li><li>Other</li></ul>
LABORATORY Received By SECTION				Title	·						Date/Tir	ne	<u> </u>
FINAL SAMPLE Disposal Me	ethod					Disposed F	Ву				Date/Tin	ne	<del></del>

Pacific Northwest Natio	onal	СН	AIN OF CUSTO	DY/SAM	IPLE A	NALYSI	(S REQ	UEST			C97-014-9	Page	1 of 1,
Collector RT SICKLE (F	RFS)		Company Contact J.H. KESSNER	Tele (5	<b>phone No.</b> 09) 372-953	8		Project Co Stewart,	ordinator DL		Data Turnaro Field	und	
Project Designation 200-ZP-1 IRM (Group 1) Gro	oundwater Sampli	ngFY1997	Sampling Location 200-W			<u></u>		SAF No. C97-014	<u> </u>		L		<del></del>
Ice Chest No.			Field Logbook No.	is P4	6£ E6			Method of	Shipment GOV. L	belic	14		
Shipped To Mobile Laboratory			Offsite Property No.	14	• • • • • • • • • • • • • • • • • • • •			Bill of Lad	ing/Air Bill	No.	<u></u>	<u> </u>	
POSSIBLE SAMPLE HAZAR	DS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C	]			1.		I		<u> </u>	
			Type of Container	Gs*									
			No. of Container(s)	1				l					ļ
Special Handling and/or Stora	ge		Volume	40ml							-		
	SAMPL	E ANALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time		1200.0	1.184			(1981)	la Wak	i Zwieli.		
B0JRD2 🗸	Water	FEB 24 19	7053	<i>[</i>			<u> </u>				_	·	<del> </del>
					<u>                                     </u>				<del>                                     </del>		-	- <u></u>	<del> </del> -
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				<u> </u>	SPECIAL	INSTRUCT	IONS	<u> </u>	<del></del>	<u></u>		М	atrix *
CHAIN OF POSSESSION		Sign/Print			STECIAL	momee						S = *	Soil Sediment
Relinquished By RT SICKLE (RFS)	Pate/Time	1340 Received By A RB Kerles	Date/I	ime /340	i				٠			SL -	Solid Studge
Relinquished By	Date/Time	Received By	Date/T		-   .				•			O ±	Water Oil Air
Relinquished By	Date/Time	Received By	Date/T	ime	1							DL =	Drum Solids Drum Liquids Tissue Wipe
Relinquished By	Date/Time	Received By	Date/T	îme	1							L "	Liquid Vegetation Other
LABORATORY Received By				Title	L					·	Date/fim	<u>.</u>	<del></del>
SECTION FINAL SAMPLE Disposal M	ethod			· · · · · · · · · · · · · · · · · · ·		Disposed B	у				Date/Time	c	<u> </u>

Pacific Northwest National Laboratory CH	AIN OF CUSTO	DY/SAM	PLE AN	NALYSI	S REQ	UEST			C97-014-	10 Page	<u>l</u> of <u>l</u>
Collector RT SICKLE (RFS)	Company Contact J.H. KESSNER	Tele <sub>1</sub>	ohone No. 09) 372-953	8		Project Co Stewart,	ordinator DL		Data Turnar Field	ound	<del></del>
Project Designation 200-ZP-1 IRM (Group 1) Groundwater SamplingFY1997	Sampling Location 200-W		-			SAF No. C97-014			· · · · · · · · · · · · · · · · · · ·		
Ice Chest No.	Field Logbook No.	4 PA	1 i E	86			W. Vel				
Shipped To Mobile Laboratory	Offsite Property No.	1/A				Bill of Lad	ling/Air Bill ノーノ				
POSSIBLE SAMPLE HAZARDS/REMARKS	Preservation	HCl to pH <2 Cooled to 4C					Ţ				
	Type of Container	Gs*									
	No. of Container(s)	1									T
Special Handling and/or Storage	Volume	40ml									
SAMPLE ANALYSIS	<u></u>	VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No. Matrix * Sample Date	Sample Time										
BOJRD3 / Water FFB 2 4 198	7 /253	-							<u> </u>		-
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		1									
CHAIN OF POSSESSION Sign/Print			SPECIAL	INSTRUCT	IONS					S =	/latrix * Soil Sediment
Relinquished By RT SICKLE BEST 24.97 1340 Received By Rh Kerkov		<sup>im</sup> 9340 27					:			SL n	Solid Sludge Water
Relinquished By Date/Time Received By	Date/T	ime								A =	· Oil · Air · Drum Solids
Relinquished By Date/Time Received By	Date/T	ime					•			Y v	Drum Liquids Tissue Wipe
Relinquished By Date/Time Received By	Date/T	ime								V s	Liquid Vegetation Other
LABORATORY Received By		Title	<u> </u>	<del></del>		·			Date/T	ine	
SECTION FINAL SAMPLE Disposal Method DISPOSITION			·	Disposed B	у			· · · · · · · · · · · · · · · · · · ·	Date/Fi	me	

Pacific Northwest Nation Laboratory	nal	CH	IAIN OF CUSTO	DY/SAM	[PLE A]	NALYS	IS REQ	UEST			C97-014	-14 Page	<u>1</u> of 1
Collector RT SICKLE (RE			Company Contact J.H. KESSNER	Tele (5	phone No. 09) 372-953	38		Project C Stewar	Coordinator t, DL		Data Turnai Field	ound	
Project Designation 200-ZP-! IRM (Group 1) Grou	ındwater Sampling	gFY1997	Sampling Location 200-W		<del></del>			SAF No. C97-0	14		- <del></del>		
Ice Chest No.	<del></del>		Field Logbook No.						of Shipment				
MA			EFL - 1111 - 4	بمهازر	86		· <del></del>	Dill of L	ding/Air Bill	hille			
Shipped To Mobile Laboratory		·	Offsite Property No.	14				Din of L	iding/Air bil	110.			
POSSIBLE SAMPLE HAZARI	DS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C									
			Type of Container	Gs*									
			No. of Container(s)	1									
Special Handling and/or Storag	ge		Volume	40ml									
	SAMPLE	ANALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time	12.25						12010-001			7834.38
B0JYW1	Water	FEB 24 19	91 0942	~									
									1				<u> </u>
	<del> </del>												
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				[	1			[		1		Ĺ	<u> </u>
CHAIN OF POSSESSION	/		t Names		SPECIAL	INSTRUC	TIONS	•				S » SE =	fatrix * Soil Sediment Solid
Religion (RFS)	Date/Time/3	40 Received By K LB Kerkau	BKW Date/Ti	1340								SL =	Sludge Water
Relinquished By	Date/Time	Received By	Date/Ti	ime								Α ==	Oil Air Drum Solids
Relinquished By	Date/Time	Received By	Date/Ti	ine								DIL = T == WI ==	Drum Liquids Tissue Wipe
Relinquished By	Date/Time	Received By	Date/Ti	ine	1							V =	Liquid Vegetation Other
LABORATORY Received By SECTION				Title	<del>.l</del>		<u></u>		-		Date/T	ime	
FINAL SAMPLE Disposal Me	thod					Disposed I	Ву			·····	Date/T	ime	

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Pacific Northwest Nat Laboratory	ional	C	CHAIN OF CUSTO	DY/SAM	IPLE A	NALYS	IS REQI	UEST			C97-014	-15 Page	<u>1</u> of <u>1</u>
Collector HT SICKLE	(RFS)		Company Contact J.H. KESSNER	Tele	phone No. (09) 372-95	38		Project Co Stewart,			Data Turnar Field	ound	
Project Designation 200-ZP-1 IRM (Group 1) G	roundwater Sa	mplingFY1997	Sampling Location 200-W					SAF No. C97-014		····		- <del></del> -	<del></del>
Ice Chest No.	~/A		Field Logbook No.	4 8%	16E E	8		Method of	Shipment C-VV-	Velin	14		
Shipped To Mobile Laboratory			Offsite Property No.	is 1A.	-			Bill of Lad	ing/Air Bill ヘンノ	No.	I		
POSSIBLE SAMPLE HAZA	RDS/REMAR	RKS	Preservation	HCl to pH <2 Cooled to 4C									
			Type of Container	Gs*									
			No. of Container(s)										
Special Handling and/or Stor	rage		Volume	40ml				·					
	SAN	APLE ANALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix	* Sample Date	e Sample Time	Section 16			มารุ่มหลังสำเริ	<u> </u>		Bit Fat WA			
B0JYW2 🗸	Wate	FEB 25 1	997 0911										
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·	<del> </del>						<del>                                     </del>		<del> </del>				<del>                                     </del>
	<del>                                     </del>	/ S:/D-			SPECIAL	INSTRUCT	TIONS	<u> </u>	- <del> </del>	<u></u>	<u> </u>	N	1atrix *
Relinquished By RT SICKLE (RFS)	) 5 Me/Ti		int Names  RB Kerk Date/T rkow 2-27	ime 14/30 -97								SE =	Soil Sediment Solid Sludge Water
Relinquished By	Date/Ti	me Received By	Date/T	ime	]							Ο *	Oil Air Drum Solids
Relinquished By	Date/Ti	me Received By	Date/T	ine	-				•			DL T	Drum Liquids Tissue Wipe
Relinquished By	Date/Ti	me Received By	Date/T	iine								L =	Liquid Vegetation Other
LABORATORY Received B SECTION	Ву	. <u></u> <u>l</u> <u>-</u>	······································	Title	<u>L</u>			•	•		Date/Ti	me	
FINAL SAMPLE Disposal I	Method			7.1,	4	Disposed B	у		·		Date/Ti	ne	

Pacific Northwest Nati Laboratory	ional	СНА	AIN OF CUSTO	ĐY/SAM	IPLE A	NALYS]	IS REQ	UEST			C97-014-12	Page	1 of 1
Collector	(RFS)	C	Company Contact J.H. KESSNER		phone No. (09) 372-953	38		Project Co Stewart,			Data Turnarou Field	ıd	
Project Designation 200-ZP-1 IRM (Group 1) Gro		g_FY1997	Sampling Location 200-W					SAF No. C97-014	ļ		<u>.t</u>		
Ice Chest No.			Field Logbook No.	.6 1	046 E 6	<i>s</i> q		Method of	Shipment <i>GU</i>	v. Ve.	hicly		
Shipped To Mobile Laboratory		C	Offsite Property No.					Bill of Lad	ing/Air Bill I	No.			
POSSIBLE SAMPLE HAZAF	RDS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C		1							
1			Type of Container	Gs*									
			No. of Container(s)	1									
Special Handling and/or Stora	ige		Volume	40ml		L							
·	SAMPLI	E ANALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon									
Sample No.	Matrix *	Sample Date	Sample Time			1							
BOJRD5 /	Water	FEB 26 1997	1036			,	<u> </u>			<u> </u>		<del></del>	
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						<del> </del>	<del> </del> -		ļ	<del> </del>	+		<del> </del>
CHAIN OF POSSESSION	1/2	Sign/Print Na			SPECIAL	INSTRUCT	IONS	<u> </u>	<u> </u>	<u>                                     </u>		s -	[atrix * Soil Sediment
Relinquished By  Relinquished By	Date/Time 2-2597  Date/Time	12-20 Received By RB, RB Ker Kon Received By	Kerk Date/Til 2-26-47 Date/Til		]							SL - W - O - A -	Solid Shudge Water Oil Air
Relinquished By	Date/Time	Received By	Date/Tir						•			DL - T - WI -	Drum Solids Drum Liquids Tissue Wipe Liquid
Relinquished By	Date/Time	Received By	Date/Tir	me					•			v -	Vegetation Other
LABORATORY Received By SECTION	y			Title	<u>.i.</u>	···			,		Date/Time		
FINAL SAMPLE Disposal N	/ethod					Disposed By	у			<u> </u>	Date/Time		

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Pacific Northwest N Laboratory	ational		CH	AIN OF CUSTO	DY/SAM	IPLE A	NALYS	IS REQ	UEST			C97-015-	13 Page	: 1 of 1
Collector RT SICKL	E (RFS)			Company Contact J.H. KESSNER		phone No. (09) 372-953	38		Project C Stewart	oordinator , DL		Data Turnaro Field	ound	
Project Designation 200-ZP-1 IRM (Group 2)	Groundwater S	ampling—F\	(1997	Sampling Location 200-W		· · ·	· · · · · · · · · · · · · · · · · · ·		SAF No. C97-01	5	,	<u></u>		<u></u>
Ice Chest No.	4/1			Field Logbook No.		PALE	EU		Method o	f Shipment	Vehic	.10		
Shipped To Mobile Laboratory				Offsite Property No.	r. 1,				Bill of La	ling/Air Bill			-	
POSSIBLE SAMPLE HAZ	ARDS/REMA	RKS		Preservation	HCl to pH <2 Cooled to 4C									
				Type of Container	Gs*									
				No. of Container(s)	1									
Special Handling and/or St	orage			Volume	40mi									
	S	ample an	NALYSIS		VOA BY FIELD GC — Chloronated Hydrocarbon									
Sample No.	Ma	trix *	Sample Date	Sample Time										
B0JYW7 ¿	w	ater	EB 24 19	17 1156										
						<u>.                                    </u>	<u> </u>	<u> </u>	<u> </u>		<del> </del>			
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										<del> </del>				
CHAIN OF POSSESSIO	1	Aime /340	Sign/Print		me /340	SPECIAL *TOTAL AC	INSTRUCT CTIVITY RES	ULTO NEED	D EXEN 2-20-9	Л ФТ 7	<u></u>	<u> </u>	S SE	Matrix * - Soil - Sediment - Solid
HT SICKLE (RFS)	12.2	4-97	KUNLIKA		7								- { w ⋅	= Sludge = Water = Oil
Relinquished By	Date	/Time	Received By	Date/Ti									A DS	- Ait - Drum Solids
Relinquished By	Date	/Time	Received By	Date/Tij	me								T WI	<ul> <li>Drum Liquids</li> <li>Tissue</li> <li>Wipe</li> </ul>
Relinquished By	Date	/Time	Received By	Date/Ti	me								V •	<ul> <li>Liquid</li> <li>Vegetation</li> <li>Other</li> </ul>
LABORATORY Received SECTION	i By	<u></u>			Title	<u> </u>						Date/Tir	ne	
	al Method				· · · · · · ·	····	Disposed B	by	<u> </u>			Date/Tir	ne	

Pacific Northwest Laboratory	National		СВ	AIN OF CUSTO	DY/SAM	MPLE ANALYSIS REQUEST  C97-015-12  Project Coordinator  Data Turnaround										
Collector RT SIC	KLE (RFS)	Company Contact J.H. KESSNER		Project Co Stewart,		• •••	Data Turnaround Field									
Project Designation 200-ZP-1 IRM (Group 2) Groundwater Sampling-FY1997				Sampling Location 200-W					SAF No. C97-015							
Ice Chest No.	Field Logbook No.  EFL -1		Method of Shipment  GOV VEHICLE													
Shipped To Mobile Laboratory	Offsite Property No.						Bill of Lading/Air Bill No.									
POSSIBLE SAMPLE H	IAZARDS/REM/	Preservation	HCl to pH <2 Cooled to 4C													
				Type of Container	Gs*											
			No. of Container(s)	1		<u>                                     </u>										
Special Handling and/or	Storage			Volume	40ml							-				
	s	AMPLE AN	ALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon											
Sample No.	Ma	trix *	Sample Date	Sample Time						1						
BOJYW5 🗸	W	ater ;	EB 24 19	97 1304	-											
							72.		1.							
							<u> </u>									
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			·		<u> </u>		<u> </u>			<u></u>			·			
CHAIN OF POSSESSI	// Def		me/340	TOTAL ACTIVITY TESSELTS NEEDED EXEMPT  S = S SE = S SO = S							Matrix * - Soil - Sediment - Solid - Sludge					
RELINQUISHED BY  RELINQUISHED BY  RECEIVED BY				Date/Ti	- W O A						- Water - Oil - Air					
Relinquished By	Date	Date/Time Received By Date/Time										DL T	Drum Solids Drum Liquids Tissue Wipe			
Relinquished By	Date	Received By	Date/Ti	me								ν -	<ul><li>Liquid</li><li>Vegetation</li><li>Other</li></ul>			
LABORATORY Recei	ived By				Title	· · · · · · · · · · · · · · · · · · ·			<del></del>			Date/Time	;			
	L SAMPLE   Disposal Method							Disposed By Date/Time								

Pacific Northwest Laboratory	National	CHÁ	IN OF CUSTO	DY/SAM	IPLE A	NALYS	IS REQ		C97-018-	10 Page	1 of 1					
Collector RT SIC	KLE (RFS)		Company Contact Telephone No. JH Kessner (509) 372-9538					Project C Stewart	oordinator DL		Data Turnaround Field					
Project Designation 200-ZP-1 IRM (Group 3) Groundwater Sampling FY1997				Sampling Location 200W					SAF No. C97-018							
Ice Chest No.				Field Logbook No.  EFL-1111-6 PAGE BG						Method of Shipment  COU. Vah 12/4						
Shipped To Mobile Laboratory				Offsite Property No.						Bill of Lading/Air Bill No. 〜ーノバ						
POSSIBLE SAMPLE H		Preservation	HCl to pH <2 Cooled to 4C													
				Type of Container	Gs*											
				No. of Container(s)	1									<u> </u>		
Special Handling and/or		Volume	40ml													
	s	ample anal	ysis	-	VOA BY FIELD GC Chloronated Hydrocarbon									,		
Sample No.	Ma	trix *	Sample Date	Sample Time				,								
B0JY24 /	W	ater -	EB 26 199	7. 1141	-											
	1															
				i												
														<u> </u>		
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CHAIN OF POSSESSI	1 /	Sign/Print Na										S - SE -	Soil Sediment Solid			
Relinquished By RT SICKLE (RFS)		72.26.97	Received By RB K.	2-26.	SL SL W						Słudge Water					
Relinquished By	Date	-/Time	Received By	Date/Tir	me							-	A -	Oil Air Drum Solids		
Relinquished By Date/Time Received By				Date/Tir	. DL - Dn T - Tis							Drum Liquids Tissue Wipe Liquid				
Relinquished By Date/Time Received By			Received By	Date/Tir	me								v -	Liquid Vegetation Other		
	ived By	···	<u> </u>		Title	<u>.</u>		····				Date/Tir	ne			
SECTION FINAL SAMPLE Disposition		<u> </u>	<del></del>	Disposed B	у				Date/Tir	ne						

Pacific Northwest No Laboratory	ational	СН	AIN OF CUSTO	DY/SAM	IPLE A	NALYS	IS RE	QUEST			C97-018-1	1 Page	1 of 1		
Collector RT SICKLE (RFS)	Company Contact Telephone No.  JH Kessner (509) 372-9538					Project Co Stewart,	oordinator DL		Data Turnaround Field						
Project Designation					Sampling Location 200W					SAF No. C97-018					
Ice Chest No.	Field Logbook No.	<del></del>	Method of Shipment												
Shipped To	Offsite Property No.	Bill of Lading/Air Bill No.													
Mobile Laboratory				NA NA											
POSSIBLE SAMPLE HAZ	ARDS/REMARKS		Preservation	HCl to pH <2 Cooled to 4C				l <u></u>	· .	l			l		
		MM	Type of Container	Gs*											
			No. of Container(s)	1						<u> </u>					
Special Handling and/or Sto	orage C 4 ° (		Volume	40ml											
	SAMPLE A	INALYSIS		VOA BY FIELD GC Chloronated Hydrocarbon											
Sample No.	Matrix *	Sample Date	Sample Time												
B0JY25 🗸	Water	2.27.97	1043	X					ļ	<u> </u>	$\perp$				
	<u> </u>				<u> </u>	<u>                                     </u>				<u> </u>					
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CHAIN OF POSSESSION	X) //	Names		SPECIAL INSTRUCTIONS  ** Total Activity Exempt.							Matrix *  S = Soil  SE = Sediment  SO = Solid				
Relinquished By RT SICKLE (APS)	Date/Time 22.27-97 10	Received By Rb 470 Rb Kerke	ow 2-27-									SL W	<ul><li>Sludge</li><li>Water</li></ul>		
Relinquished By	Date/Time	Received By	Date/Tir	me								A DS	= Oil = Air = Drum Solids		
Relinquished By	Date/Time	Received By	Date/Tir	me	1							т -	<ul> <li>Drum Liquids</li> <li>Tissue</li> <li>Wipe</li> </ul>		
Relinquished By	Date/Time	Received By	Date/Tir	me								L v	<ul> <li>Wipe</li> <li>Liquid</li> <li>Vegetation</li> <li>Other</li> </ul>		
LABORATORY Received	Ву	<u>,                                  </u>		Title	<u>.l</u>	<u></u>					Date/Time		<u> </u>		
SECTION  FINAL SAMPLE Dispose DISPOSITION	al Method				<del></del>	Disposed B	Ву	<u></u> .	······································		Date/Time	e			

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